

U.S. EPA Public Meeting

Yosemite Slough

San Francisco, CA



August 21, 2013

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Tonight's Meeting Agenda

- EPA Presentation (30 minutes)
- Questions and Answers
- Formal Public Comments

EPA's Presentation Topics

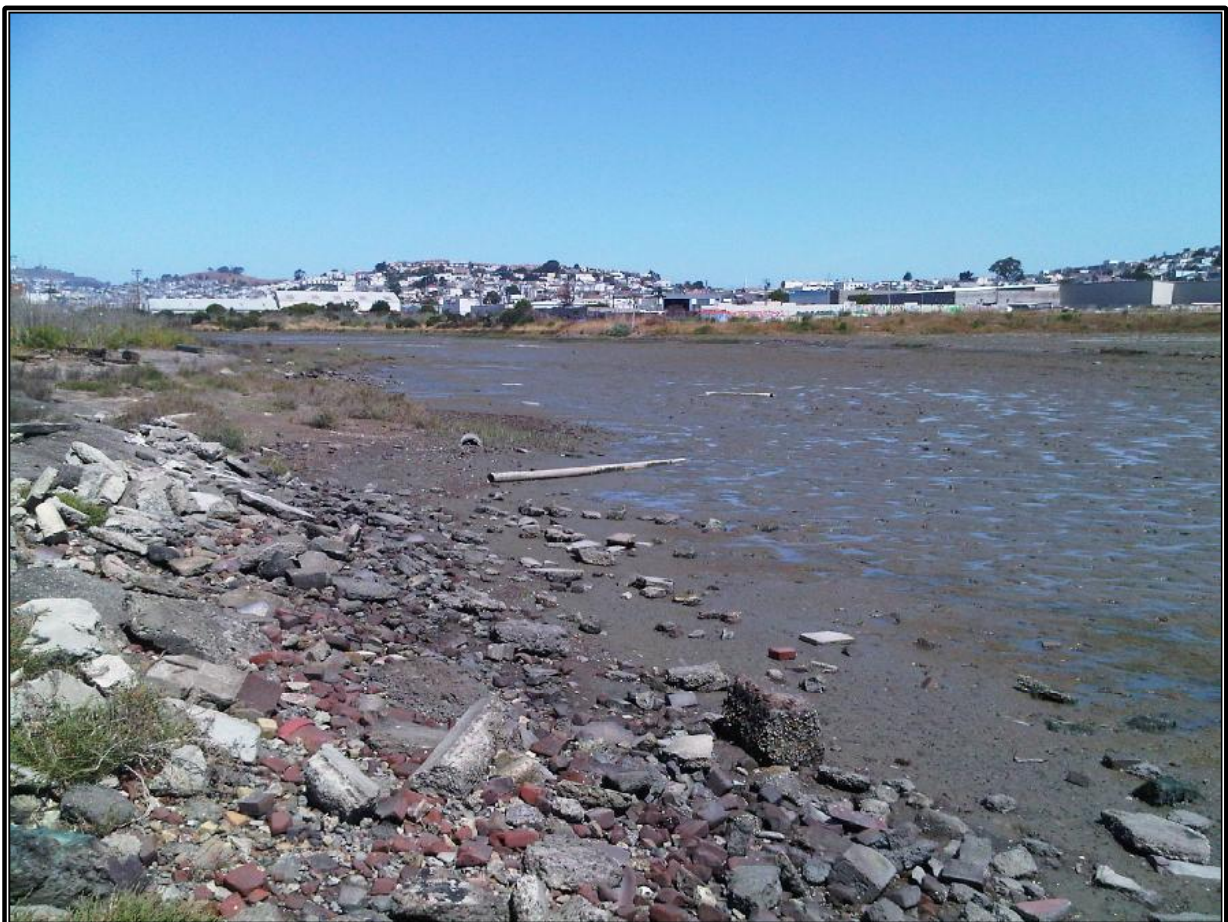
- ▶ Why is the Slough contaminated?
- ▶ What are the risks from the contamination?
- ▶ Which cleanup options did EPA consider?
- ▶ What is EPA recommending and why?

Yosemite Creek Watershed



Map by William Lettis and Associates Inc; Oakland Museum of California; and San Francisco Estuary Institute

Yosemite Slough







EPA's Project Boundary



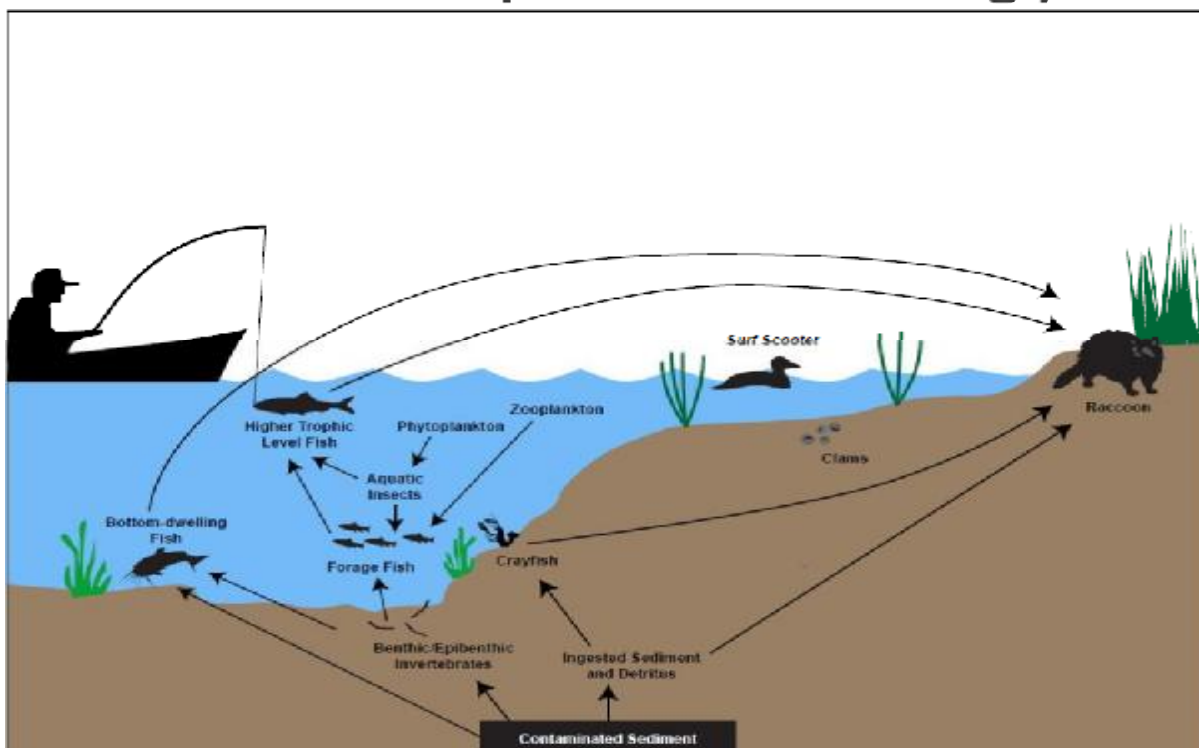
Mud Test Locations



Primary Contaminants in the Slough mud

- ▶ Polychlorinated Biphenyls (PCBs)
- ▶ Lead

Risks to People and Ecology



Why is a Cleanup Necessary?

- ▶ Primary Risks to People:
 - Eating fish with contaminants
 - Touching the contaminated mud
- ▶ Primary Risks to Ecology:
 - Birds and fish eating worms and insects with contaminants

What Must the Cleanup Achieve?

Answer: Achieve and maintain EPA's required cleanup goals in the top layer of mud

	Current Average Concentration	EPA's Required Average Concentration*
PCBs	5 _{ppm}	0.386 _{ppm}
Lead	359 _{ppm}	218 _{ppm}

ppm = parts per million

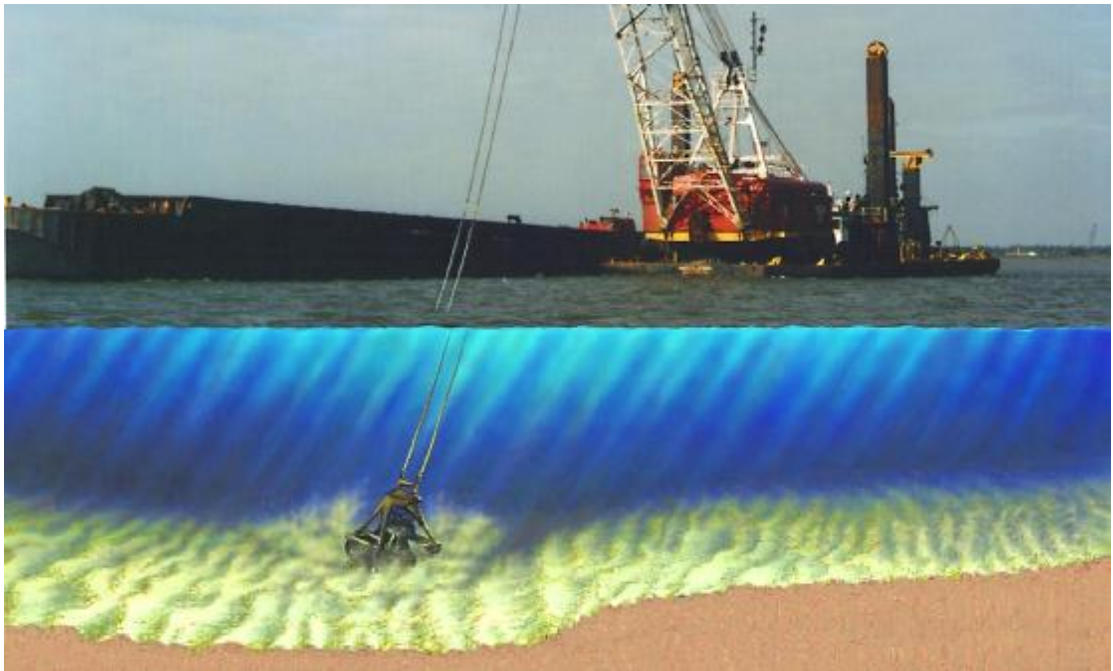
*EPA's Maximum Allowed Concentration is 1.24ppm PCBs and 436ppm Lead

CLEANUP OPTIONS

Typical Sediment Cleanup Technologies

- No Action
- Institutional Controls
- Monitored Natural Recovery
- Enhanced Monitored Natural Recovery
- In-situ Treatment
- Capping
- Dredge and Haul Off-site Disposal
 - Mechanical Dredge or Hydraulic Dredge
 - Sediment Dewatering
 - Haul Off and Disposal at License Landfill

Mechanical Dredge



Example of a Mechanical Dredge



Hydraulic Dredge



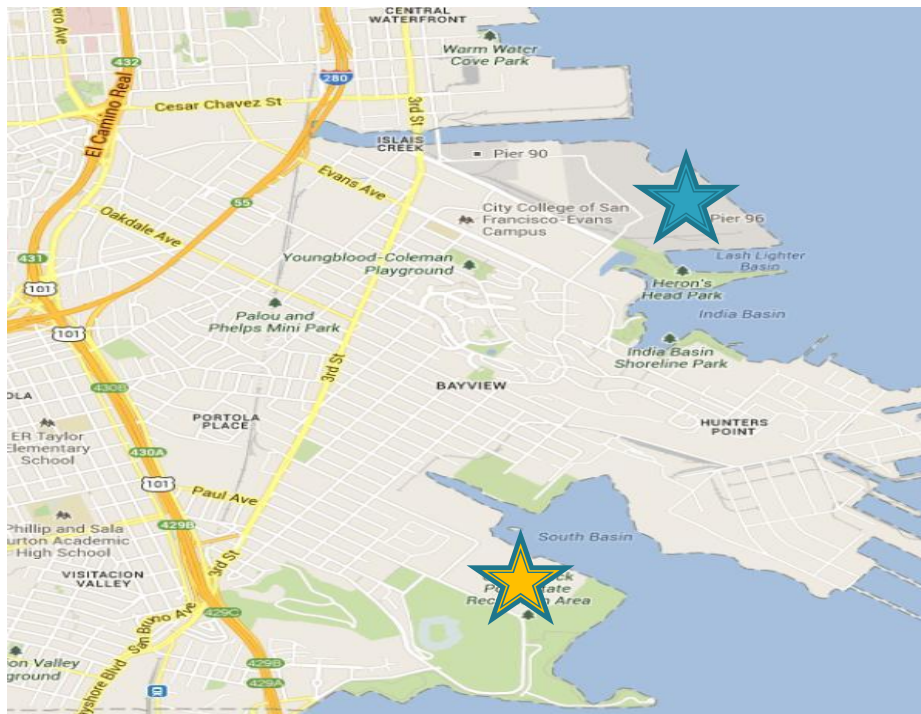
Mud drying bags draining out
excess water



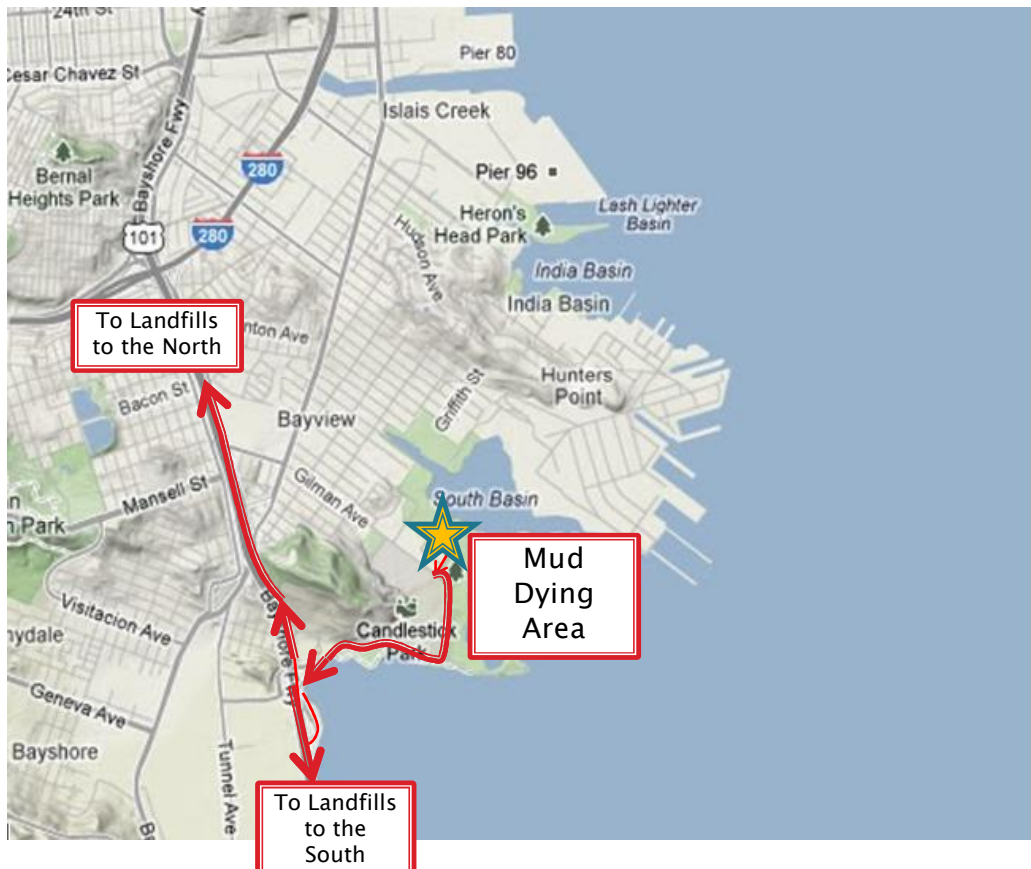
Hauling Away Dried Mud



Mud Drying Location ★
Backup Mud Drying Location ★



Haul Routes: Option 1



Haul Routes: Option 2



EPA's Lessons Learned from Other Sediment Cleanup Projects

- Focus dredging to limit spreading contamination into the water
- Select the best combination of cleanup technologies and equipment
- Reduce construction-related impacts to nearby communities
- Test to ensure cleanup is effective

Overview of Cleanup Options

- Do Nothing.
- Dig up, dry and haul away some of the contaminated mud. Place clean sand and mud cap on top.
- Dig up, dry, and haul away all of the contaminated mud. Place clean sand and mud on top.

Cleanup Options

	Truckloads of Mud Removal	Cap	Rely on Natural Burial	Institutional Controls	Test Effectiveness
1	0	No	No	No	No
2	590	Yes	No	Yes	Yes
3	420	Yes	Yes	Yes	Yes
4	250	Yes	Yes	Yes	Yes
5	1,070	Yes	No	Yes	Yes
6	2,530	Yes	No	Yes	Yes
7	4,100	No	No	No	Yes



Evaluation of Cleanup Options

	Truckloads of Mud Removal	Effectiveness	Cost	EPA Rating
1	0	No	0	Low
2	590	High	\$7.2M	High
3	420	Low	\$6.2M	Low
4	250	Low	\$5M	Low
5	1,070	High	\$11.6M	High
6	2,530	Moderate	\$23.1M	Moderate
7	4,100	Moderate	\$35.7M	Low

EPA Recommends Option Number 5

Dredge and Cap Top Layer of Mud

- ▶ Dredge technology, mud drying location, haul routes to be decided during design phase

Prevent Recontamination

- ▶ Stabilize slough banks
- ▶ Monitor natural sedimentation rates
- ▶ Enforce boating and other use restrictions consistent with State Parks General Plan

Confirm Remedy is Working

- Conduct long-term remedy effectiveness monitoring

California State Parks Wetlands Restoration Project Area

San Francisco Bay

● Boring Location

11 Removal Based on Breachance of RDR in

0 40 100 200

Figure 8.6

- ❖ Cleanup Option 5 provides the best mix of technologies to protect people and ecology in an efficient and permanent fashion
- ❖ Cleanup Option 5 includes flexibility to integrate results from upcoming design studies to optimize the remedy and minimize short-term impacts to local community

WHAT HAPPENS NEXT?

Current Project Schedule

End of 2013: EPA Final Decision on Cleanup Plan

2014: Legal settlement negotiations

2015: Design Studies and Plans

2016: Cleanup Work

2017 onward: Long-term monitoring

Legal Settlement Negotiations

- ▶ EPA's "Polluter Pays" Policy
- ▶ EPA intends to reach a legal settlement with potentially responsible parties to perform the cleanup work
- ▶ Cost estimate of EPA's proposed cleanup plan: \$11.6M

Design Studies and Plans to Minimize Community Impacts

- ▶ Odor generation study
- ▶ Mud drying location
- ▶ Air quality protection program
- ▶ Truck traffic management plan

Technical Assistance Services for Communities (TASC) Program

THE PURPOSE OF TASC:

- ▶ Provide non-advocacy technical assistance at no cost to the community
- ▶ Empower the community to assist in addressing environmental issues & actions that impact them

EPA CONTACT FOR TASC:

Viola Cooper, (415) 972-3243
cooper.viola@epa.gov

<http://www.epa.gov/superfund/community/tasc>

After Yosemite Slough cleanup is complete...

- ▶ Navy proceeds with cleanup of contaminated sediment in South Basin (Hunters Point Shipyard Parcel F)
- ▶ State Parks completes remaining wetlands restoration work and adjacent Park amenities including walking trail
- ▶ Yosemite Slough enters long-term recovery period

How to get Information about EPA's Plan for Yosemite Slough

- ▶ EPA website:
www.epa.gov/region9/YosemiteSlough
- ▶ Visit an Information Repository:
 - ARC Ecology Offices at 1331 Evans Avenue
Please Call first: (415) 643-1190
 - Bayview Library at 5075 3rd Street
Go to “Reference Desk” for help
 - EPA Superfund Record Center
95 Hawthorne Street
Open 8am to 5pm, Monday to Friday

How to get Information about EPA's Plan for Yosemite Slough

- ▶ Signup on EPA mailing list and receive fact sheets and meeting notifications
- ▶ Call EPA:
 - Jackie Lane: (415) 972-3236
 - Craig Cooper: (415) 947-4148

How to Comment on EPA's Plan

- ▶ Tell us your comments tonight
- ▶ Leave us a comment card tonight
- ▶ Email: cooper.craig@epa.gov
- ▶ Write: U.S. EPA, Attn: Craig Cooper
Mailcode: SFD8-3
75 Hawthorne Street
San Francisco, CA 94105

The deadline for public comments on
EPA's Proposed Cleanup Plan:

SEPTEMBER 6, 2013

THANK YOU !!!!!!!!!!!!!!!!

- ▶ Questions ?
- ▶ Formal Public Comment Period